Identification and Virulence of a New Pathogenic Bacterium Isolated from *Spodoptera exigua*

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A new pathogenic bacterium to *Spodoptera exigua* was isolated and characterized. This bacterium was positive to Gram staining. Cell shape was round or ovoid and its average diameter was estimated to be 0.8 ± 0.2 ㎛. Genus was identified as *Enterococcus* by biochemical test as spore staining, anaerobic growth, catalase reaction, and arginine hydrolysis. Characteristics of heat tolerance (60℃ at 30min) and growing capacity at extreme environmental conditions identified these isolates *E. faecalis*. Sherlock system also supported our identification. Major symptom of the larvae infected with this bacterium showed black stripes at the intersegmental membrane. Half lethal doses (LD_{50}) was estimated to be 22,593 cells per 4th instar larva. Half lethal times (LT_{50}) varied among different bacterial concentrations: 7 days at 10^6 cells, 6 days at 10^7 cells, and 2 days at 10^8 cells.